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# **Understanding commercial actors' engagement in policy debates on proposed e-cigarette regulation in Scotland**

## **Corresponding author/lead author:**

Dr Theresa Ikegwuonu

MRC/CSO Social and Public Health Sciences Unit,

University of Glasgow,

Berkeley Square, 99 Berkeley Street, Glasgow, G3 7HR, UK

Email: [theresaikegwuonu@gmail.com](mailto:theresaikegwuonu@gmail.com)

Telephone: +44 141 353 7500

Fax: +44 141 332 0725

## **Co-authors:**

Prof Shona Hilton, MRC/CSO Social and Public Health Sciences Unit, University of Glasgow, UK

Prof Katherine E. Smith, School of Social Work & Social Policy, University of Strathclyde, UK

Ms Christina H. Buckton, MRC/CSO Social and Public Health Sciences Unit, University of Glasgow, UK

Dr Mark Wong, Urban Studies, School of Social and Political Sciences, University of Glasgow, UK

Dr Heide B. Weishaar, MRC/CSO Social and Public Health Sciences Unit, University of Glasgow, UK

**Key words:** E-cigarette regulation, commercial actors, health policy, United Kingdom, Scotland

## **Understanding commercial actors' engagement in policy debates on proposed e-cigarette regulation in Scotland**

### **What this paper adds**

- A lack of research examining the diversity of commercial actors engaging in e-cigarette policy debates means little is known about their views on e-cigarette regulation.
- The distinct (sometimes competing) interests of the different commercial actors informed their positions in e-cigarette regulation.
- Our analysis highlights the variation among commercial actors, and the potential for collaboration and strategic distancing.
- Using a mixed methods approach, our analysis provides important insights into industry engagement in early e-cigarette policy debates, enabling public health to develop more informed responses.

**Word count: 3900**

### **Abstract**

There is growing concern about transnational tobacco corporations' (TTCs) and other commercial actors' involvement in e-cigarette policy development. Previous analyses suggest that TTCs used e-

cigarette debates to demonstrate alignment with public health and re-gain policy influence. Less is known about the engagement of other types of commercial actors in e-cigarette policy debates.

This paper is the first to empirically analyse commercial actors' engagement in an e-cigarette policy consultation process and to examine their views on proposed regulation. It applies mixed methods, drawing on policy consultation submissions (n=32), semi-structured interviews (n=9) and a social network analysis of website links among 32 commercial actors.

The results show that commercial actors' positions on e-cigarette regulation aligned with business interests. TTCs, independent e-cigarette manufacturers and other non-licensed commercial actors were opposed to most aspects of potential e-cigarette regulation (except for age of sale restrictions), whereas licensed commercial actors, including pharmaceutical companies, supported more stringent regulation. While collaboration was viewed as strategically important to gain policy influence, distinct commercial interests and concerns about TTC credibility led to strategic distancing and to collaboration being largely confined to sector boundaries. In addition to reiterating arguments employed by TTCs in previous regulatory debates, commercial actors focused on highlighting the technical complexity and harm reduction potential of e-cigarettes.

Awareness of the various commercial interests and strategic positioning of commercial actors in e-cigarette policy should inform public health advocacy and policy development, including managing conflicts of interest in the context of FCTC Article 5.3.

**Word count: 244**

## Background

The regulation of e-cigarettes varies considerably in countries around the globe, with 100 countries having national or federal laws regulating e-cigarettes and 30 countries banning the use of e-cigarettes [1]. Polarised views on e-cigarettes and their regulation hinge on: the relative harms compared to combustible cigarettes; their effectiveness for smoking cessation; potential to re-normalise smoking; attractiveness to young people and those who have never smoked; role in sustaining nicotine addiction; and the potential for transnational tobacco corporations (TTCs) to use e-cigarettes to regain credibility [2, 3]. While there is some consensus on the benefits of e-cigarettes for smokers who are able to switch completely to using them [4, 5], the other concerns persist and have informed some contentious debates [6-9].

A variety of commercial actors engage in debates on e-cigarette regulation. Among these, TTCs have received particular attention because they have successfully prevented or weakened previous public health regulation [10, 11]. Tobacco companies argue that e-cigarettes represent ‘reduced-risk products’ with the potential to wean smokers off combustible cigarettes [12, 13]. Yet, the interests and preferences of TTCs around e-cigarette regulation remain under-examined, and even less is known about other types of commercial actors.

The development of The Health (Tobacco, Nicotine etc. and Care) (Scotland) Act 2016 [14] (Box 1), which included two consultation exercises, provides an opportunity to examine commercial actors’ engagement in e-cigarette policy [15]. As one of the first pieces of regulation worldwide, the Act focused solely on e-cigarettes; it did not differentiate between specific next generation products and did not address heated tobacco products, oral tobacco products or other devices. In this paper, we draw on commercial actor submissions to two Scottish policy consultations (focusing on potential policy responses to e-cigarettes and vaping), stakeholder interviews and websites, to examine commercial sector interests in e-cigarette regulation. The

specific research questions focussed on commercial actors' interests in, and positions on, the benefits, harms and regulation of e-cigarettes and commercial actors' efforts to collaborate with each other and shape e-cigarette policy. This analysis is relevant to e-cigarette policy discussions internationally, since it provides insights into relationships between different types of commercial actors and interests.

**Box 1:** Chronology of the development of the Health (Tobacco, Nicotine etc. and Care) (Scotland) Act 2016

(The formal opportunities for commercial actors to engage in the policy process appear in **bold**.)

10 October 2014      Scottish Government (SG) launched a consultation on  
“Electronic cigarettes and Strengthening Tobacco  
Control in Scotland” [15].

October 2014 –      **Consultation opened for submissions.**  
April 2015

October 2014 –      **Meetings between Scottish Government and several**  
April 2015            **political actors to consult on Scottish Government’s**  
                             **plans to adopt regulation of e-cigarettes.**

May 2015            Scottish Government released its report on the  
consultation on e-cigarettes and tobacco control in  
Scotland and its response to the consultation [16].

4 June 2015           The Health (Tobacco, Nicotine, etc. & Care) (Scotland)

4 June 2015	The Health (Tobacco, Nicotine, etc. & Care) (Scotland) Bill was introduced in the Scottish Parliament.
Summer 2015	<b>The Scottish Parliament's (SP) Health &amp; Sports Committee (designated lead parliamentary committee) consulted with a range of experts on the bill, including representatives from the commercial sector, third sector/civil society, e-cigarette user groups, local authorities and health professionals [17, 18].</b>  <b>The Health &amp; Sports Committee also engaged in a wider public consultation on restricting the sale of e-cigarettes through the use of an online survey, Facebook, youth events and video blogs [17, 18].</b>
9 November 2015	The Health and Sports Committee published the Stage 1 Report on Health (Tobacco, Nicotine etc. and Care) (Scotland) Bill, demonstrating clear support for the Bill [19].
3 March 2016	The Health (Tobacco, Nicotine etc. and Care) (Scotland) Act 2016 passed in the Scottish Parliament [14].

## Methods

This study was part of a larger mixed methods project that combined: (i) documentary analysis of consultation responses, related websites, reports and briefings; (ii) network analysis of the weblinks among the actors who submitted consultation responses; and (iii) thematic analysis of semi-structured interviews with a sample of these actors[20]. We analysed the data relating to a sub-

set of commercial actors (defined as organisations with a financial interest in the production and marketing of e-cigarettes).

The study obtained ethical approval from the University of Glasgow College of Social Sciences Ethics Committee for Non-Clinical Research Involving Human Subjects (application number: 400150145).

### **Identification and categorisation of actors with commercial interests in e-cigarettes**

The larger project identified 121 organisations involved in the policy consultations, 32 of which had commercial interests. The classification of commercial actors, while challenging due to the dynamic nature of the market and the fact that relationships between organisations were not always clear [21], was undertaken according to the organisations' distinct interests in e-cigarettes, which led us to identify five categories (Table 1).

[Table 1 here](#)

### **Documentary analysis**

The Scottish Government consultation process sought views on 21 policy proposals, covering the following areas: age of sale; advertising; retailing; and use in enclosed public spaces (Table 2). We analysed the 32 commercial actor submissions and related documentary data to determine key attributes for each organisation including: industry sector; geographical location; and public stance on each policy proposal. All data were numerically coded in an Excel spreadsheet.

In-depth thematic analysis of free text within the commercial actor submissions was carried out using NVivo11. Double coding of 20 consultation responses was undertaken independently by two senior researchers to develop a coding framework, driven by the research questions. After discussion and agreement by the research team, all data were systematically coded by one researcher using this framework.



## Social network analysis

We used the webcrawling software IssueCrawler (a web network location and visualisation software that searches specified sites and captures links) to identify weblinks among the commercial actors who participated in the policy consultation processes, using these as proxies for publicly disclosed relationships. Webcrawling has been used to map the interconnections of individual blogs to highlight the value of the IssueCrawler tool to study patterns of interaction [22]. The advantage of using webcrawling, over manual searches of webpages, is that webcrawling is able to systematically search websites much more in-depth [23]. Webcrawling was undertaken June-July 2016, i.e. approximately one year after the consultations took place, shortly before the interviews were conducted. Weblinks among network actors were extracted up to three degrees of separation ('three clicks away') as this was the maximum crawl depth possible, taking into account the direction of the weblinks (see arrowhead direction in Figure 1). Manual webcrawling was carried out for websites (n=10) that were not accessible to IssueCrawler in order to identify any direct weblinks between these organisations and other network actors (limited to one degree of separation). Organisations without websites (n=2) were included in the data file as isolates. Network analysis was carried out in Visone [24], with each commercial actor represented as a node. The Girvan-Newman edge-betweenness community detection algorithm [25] was used to identify clusters.

The study's webcrawling component is limited in two ways: first, weblinks only represent information about relationships that organisations are willing to disclose (in the public domain), and do not necessarily translate into operational interactions; second, webcrawling is necessarily undertaken at a particular point in time, yet organisational relationships are dynamic and may have differed subsequently. For these reasons, this paper focuses on the thematic analysis of the policy documents and stakeholder interviews. However, given one of the key concerns about commercial actor engagement in e-cigarette policy has been the potential for coalition-building and using third

parties to enable TTC policy influence [26], we used the network analysis of the webcrawling data to provide contextual insights into cross-organisational links which may not have been otherwise evident. Although webcrawling data are too massive to check manually [27] we did manually check a subset of the commercial actor websites (n=20) to better understand identified weblinks. This suggested that membership (e.g. being member of a trade body or umbrella organisation) and cross-referencing (e.g. linking to other organisations to support particular claims) were frequent relationship types (i.e. that these links were meaningful).

### **Interview data**

This paper also draws on nine interviews with commercial actors undertaken in October 2016 - August 2017. Interviews explored commercial actors' perspectives on the policy process and their reasons for engaging; views on the potential harms, benefits and regulation of e-cigarettes; commercial actors' efforts to shape e-cigarette policy; and collaborate in the process. Interview guides were refined for each interview to explore issues raised in their respective organisational consultation submissions and relationships identified via the social network analysis. We used purposive sampling of commercial actors to achieve maximum variation regarding organisation type and policy positions [28] and approached individuals at management/director level. The overall response rate for commercial interviewees was 25%. The nine interviews undertaken involved four of the five categories of commercial actors (the advertising industry organisations we approached declined to participate – Table 1). Interviews lasted between 45 minutes and 1 hour. All interviews were recorded and transcribed verbatim.

Transcripts were read and re-read by the team. A randomly chosen subset of the transcripts (n=3) was double-coded independently by two members of the research team, informed by the research questions, the documentary coding framework and new themes that emerged in the interviews [29]. Based on a discussion of this coding, a thematic coding frame was developed and the lead author then coded all transcripts using iterative comparisons. Coding-checking was

undertaken by the senior author by randomly picking codes and sections of text to assess coding consistency and comprehension.

## Findings

Table 1 provides an overview of the key characteristics of the 32 commercial organisations. The e-cigarette market has continued to evolve since our data collection and not all of the actors in our analysis remain active (e.g. the e-cigarette manufacturer, ROK, no longer appears to be trading and the Electronic Cigarette Industry Trade Association (ECITA) has been superseded by the UK Vaping Industry Association (UKVIA) and the Independent British Vape Trade Association (IBVTA)).

## Understanding commercial actors' positions on regulating e-cigarettes

Commercial actors varied in their positions on specific regulatory proposals (Table 2).

### Table 2 here

Most commercial actors agreed on proposed regulation to limit the age of sale of e-cigarettes to 18 years (78% in support). The only organisation opposing such restrictions was the National Pharmacy Association, who argued that underage smokers should have access to e-cigarettes for smoking cessation purposes. Commercial actors were least supportive of banning the use of e-cigarettes in public spaces (9% in support), arguing that *'there is no consensus [...] about whether there are risks to public health from second-hand vapour'* (Co-Operative Food, consultation), and that a ban would be *'disproportionate'* (Totally Wicked, consultation).

Proposals for restricting domestic advertising for e-cigarettes were supported by 38%. Claims that advertising was already being sufficiently controlled via self-regulation and socially responsible practices were commonly provided by TTC subsidiaries. For example, Blu (UK) claimed that existing self-regulation ensured that advertising would *'not target underage persons or non-smokers but should be directed solely at adults who wish to use e-cigarettes in order to reduce*

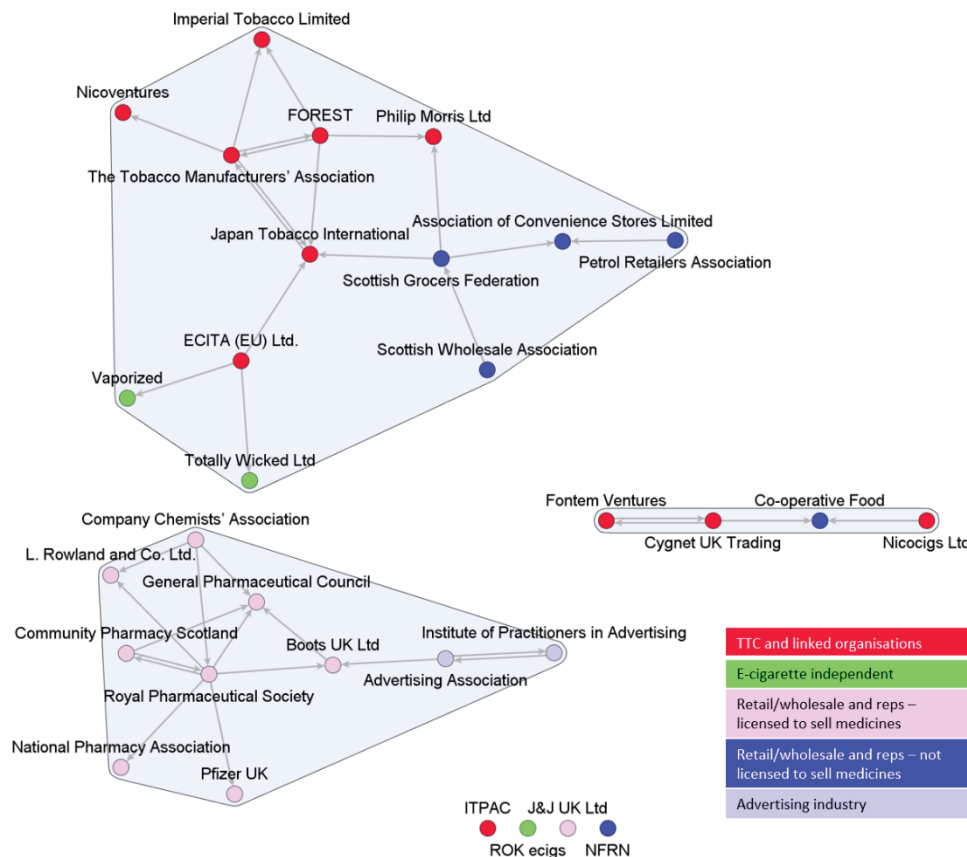
*their consumption of tobacco*’ (Blu (UK), consultation). Likewise, Nicoventures highlighted that the UK Committee of Advertising Practice and the UK Broadcast Committee of Advertising Practice had *‘introduced specific measures to protect young people and non-smokers from inappropriate e-cigarette advertising’*, arguing that further regulation was unnecessary (Nicoventures, consultation). Pharmaceutical companies, in contrast, argued that advertising should be regulated, but that licensed devices should be exempt to promote their use for smoking cessation.

Many commercial actors (across sectors) employed harm reduction arguments to support their positions, but how they did so varied. Commercial actors with no licence to produce or market medicinal products drew on a claimed *‘general consensus among the medical community [...] that electronic cigarettes offer significant potential public health benefits’* (Fontem Ventures, consultation) to support their arguments that e-cigarettes are more effective in overcoming addiction than NRT and less harmful than combustible cigarettes. Similarly, Totally Wicked (an independent e-cigarette retailer [30]) referenced a Public Health England report: *‘Electronic cigarettes are at least 95 times safer than tobacco cigarettes’* [31] (Totally Wicked, consultation). In contrast, actors representing pharmaceutical companies employed the same harm reduction narrative to argue for more stringent regulation of unlicensed products. These actors distinguished between licensed medicinal devices – which they argued were suited for smoking cessation – and unlicensed e-cigarettes – which they portrayed as lifestyle products with potential to induce young people and never smokers to become addicted to nicotine.

### **Collaboration and competition between commercial actors**

While the interview data suggest that collaborations were viewed as important to gain political influence, competing business interests and concerns about the negative reputation of TTCs appeared to hamper coalition-building in some cases. The weblink analysis identified three clusters and a few isolated peripheral organisations (Figure 1), visualising potential relationships that were then explored further via the interview data.

Figure 1 here



**Abbreviations:** ECITA (Electronic Cigarette Industry Trade Association), **FOREST** (Freedom Organisation for the Right to Enjoy Smoking Tobacco), **ITPAC** (Imported Tobacco Products Advisory Council), **NFRN** (National Federation of Retail Newsagents)

**A** → **B** signals organisational website A include one or more weblink(s) to website B.

**Figure 1:** Network analysis highlighting weblinks between organisations with a commercial interest, evident in the e-cigarette policy debate

The first and largest cluster comprised of seven TTCs and affiliated organisations (including FOREST, an industry-funded smokers' rights association), four retail/wholesale organisations not licensed to sell medicines and two independent e-cigarette companies. TTCs and their affiliates were densely linked with each other and with two retailers and wholesalers with a previous history of collaborating with TTCs (the Scottish Grocers' Federation [32] and the Petrol Retailers

Association [33]). While Nicoventures, a stand-alone company established in 2011 by British American Tobacco, was part of this cluster, via a link to the Tobacco Manufacturers' Association (a trade group), the other TTC subsidiaries and brands were not. The two independent e-cigarette manufacturers were attached to the network via one link to ECITA, suggesting that they were more peripheral to the cluster and distanced from the TTCs and their affiliates. The subsequent disappearance of ECITA as the main e-cigarette trade body in the UK and the emergence of two independent umbrella organisations, UKVIA (which all the TTCs in our analysis are members of) and IBVTA (which focuses on independent e-cigarette companies, albeit with some overlap), further underlines this sense of strategic separation.

A second, smaller but more densely connected cluster consisted of eight pharmaceutical actors and two, peripherally located representatives of the advertising industry. The high density of links between pharmaceutical actors suggests that this sector was highly connected. Moreover, the clear separation between pharmaceutical actors and both TTCs/TTC-affiliated organisations and independent e-cigarette manufacturers mirrors their contrasting positions on regulating e-cigarettes and was also reflected in the interview data.

The third and smallest cluster consisted of three TTC e-cigarette subsidiaries and TTC-owned e-cigarette brands, Fontem Ventures, Nicocigs Ltd and Cygnet UK Trading Ltd trading as Blu e-cigarettes, and a non-licensed retail organisation. The lack of weblinks between TTCs e-cigarette subsidiaries and their parent companies (both ways) may be illustrative of strategic attempts to distance reduced-risk products from tobacco industry parent businesses. This was also evident in the interviews where one interviewee who represented a TTC-owned e-cigarette subsidiary indicated that they wanted to be referred to as a representative of an e-cigarette manufacturer, not a tobacco industry representative.

The interview data confirms the SNA findings that collaboration largely aligned with business interests and occurred *within*, rather than across, industry sectors. Collaboration was

important to enhance policy influence and align messages: *'We would align with the RPS [Royal Pharmaceutical Society], probably GP bodies as well... it would be a slightly stronger message from more than one body.'* (Pharmacy representative). However, the potential negative reputational consequences of being associated with TTCs resulted in reluctance to collaborate with TTCs by independent e-cigarette manufacturers and pharmacy sector representatives: *We wouldn't work with them [TTCs], that would be, reputationally for us, that would be damaging* (Pharmacy representative). These concerns help explain the limited weblinks between TTCs and other commercial actors.

### **Efforts to secure e-cigarette policy engagement in the context of concerns about FCTC Article 5.3**

Actors representing TTCs and independent e-cigarette companies were concerned about being excluded from the policy process via FCTC Article 5.3, which protects public health policies from the commercial interests of the tobacco industry [34]. They argued that involving e-cigarette manufacturers in policy processes did not contradict the FCTC: *'Article 5.3 of the WHO Framework Convention on Tobacco Control (FCTC) is not intended to prevent the views of manufacturers of lawful products from being heard and properly taken into account.'* (JTI, consultation). Instead, engagement was highlighted as important to ensure accountability: *'The policy makers should have to meet with the industry representation... That's essential, that policy makers are held to account and [...] get a view on what they're actually making a policy for.'* (Independent e-cigarette industry representative). Yet, TTCs perceived public health actors as reluctant to engage with them: *'I think the issue is the public health community [...] isn't accustomed to the idea of a public health problem like smoking being solved by commercial actors.'* (TTC representative).

TTC representatives emphasised that e-cigarettes were not tobacco products, claimed the FCTC did not apply to e-cigarettes and argued there was no basis for any exclusion of e-cigarette manufacturers. Claims about the technical complexity of e-cigarettes (compared to combustible

cigarettes) were used to underline the case for engaging with product manufacturers. This mirrors arguments TTCs have previously employed to influence regulation [35].

While pharmaceutical actors also commented on the need for commercial sector inclusion in policy debates, they were less vocal on this subject: *“I think it’s important that all of the stakeholders have the opportunity to share their views... it’s for the policy makers to seek out the range of views, but also understand the basis upon which each organisation is presenting its view”* (Pharmaceutical industry representative). These actors seemed less concerned about experiencing exclusion themselves and made fewer references to Article 5.3.

## Discussion

This study is the first empirical analysis of commercial actors’ views on, and engagement in, the development of e-cigarette regulation. The Scottish case illustrates that commercial actors’ business interests determined their positions on e-cigarette regulation. While the interests of TTCs, e-cigarette companies, retailers without a licence to sell medicines and advertisers overlapped, leading to considerable opposition to many regulatory proposals, pharmaceutical organisations were supportive of more stringent regulation, following their interest to protect their revenue from the sale of NRT and licensed products. The identification of clear differences in the interests and positions of commercial actors engaging in e-cigarette policy debates underlines the importance of not treating commercial actors as a monolith. Indeed, we found variations even within the five commercial actor categories we identified.

Our analysis identifies two strategies and five common arguments used by commercial actors to influence e-cigarette policy. Our findings confirm previous tobacco industry research on the industry’s political activity, taxation, and marketing policies [11]. Like our paper, Ulucanlar and colleagues distinguish between “discursive” (argument-based) and “instrumental” (action-based)



industry strategies. Our findings show that these industry strategies are not only used by TTC actors, but also by a broader range of commercial actors.

The first commercial actor strategy we identified combines strategic collaboration with strategic distancing. In line with previous TTC attempts to form alliances with others [10, 11], commercial actors viewed collaboration as an important means of enhancing their ‘voice’ in policy debates. Yet, decisions about strategic collaboration were hampered by commercial actors’ contrasting policy positions and the controversy around TTCs. Independent e-cigarette manufacturers seemed wary about collaborating with manufacturers of combustible cigarettes, despite having overlapping policy interests, as they noted TTCs’ low credibility. Pharmaceutical actors occupied their ‘own space’ (illustrated in the network analysis) and positioned themselves as healthcare actors. Their intentions in doing so were to emphasise the importance of securing a medicinal licence for e-cigarettes (while protecting NRT revenue) and maintaining their positive image as supporters of public health policy (despite having distinct commercial interests) [26]. This shows that TTCs continue to struggle in their efforts to overcome political isolation [36]. It also highlights that the positioning of commercial actors in policy debates is influenced by broader, strategic goals and that, while arguments might differ, commercial actors’ primary interest remains economic rather than health. It is therefore important for policymakers not to focus overly on visible links between commercial organisations or on specific arguments in policy debates, but to understand how policy preferences relate to wide-ranging commercial interests.

The second strategy, specific to TTCs and confirming previous work on strategic reputation management [11], was to maintain a sense of separation from their e-cigarette subsidiaries in public domains. This strategy was employed even though TTCs had firmly established their presence in the e-cigarette market prior to the Scottish consultation [37], with Imperial Tobacco setting up Fontem Ventures in February 2013, and Philip Morris International acquiring Nicocigs in June 2014 [38-40]. In the context of low policy credibility, TTCs attempted to separate e-cigarettes from

their tobacco industry parent business in order to avoid tarnishing the image of e-cigarettes. Our findings confirm previous research which identified a TTC strategy of buying up independent e-cigarette companies to increase policy influence and credibility [21].

We identified five arguments that commercial actors employed to influence e-cigarette policy, mirroring arguments that TTCs have successfully employed previously to counter public health policy. First, commercial actors involved in the manufacturing and retail of e-cigarettes claimed that the complexity of e-cigarettes required their expertise and involvement in policy discussions [35]. Second, most commercial actors positioned e-cigarettes as harm reduction products to help smokers quit. While this argument has been employed previously [41], we found differences between TTCs and other commercial actors. Third, except for pharmaceutical organisations, commercial actors argued that existing regulation was sufficient, using examples of self-regulation to reinforce this claim and reiterating arguments that legislation is unnecessary and disproportionate, which have been used widely by TTCs [10, 11]. Fourth, mirroring TTCs' inequality frames promoted in the context of tobacco policy [11], TTCs and their affiliates argued that the regulation of e-cigarettes would unfairly affect smokers and have unintended public health costs by depriving smokers of effective quit aids. Finally, TTCs, TTC-affiliated organisations and independent e-cigarette companies employed two arguments seeking to reject claims that FCTC Article 5.3 requires their exclusion from policy debates: (i) Article 5.3 does not apply since e-cigarettes are not a tobacco product and can support public health goals [42]; and (ii) stakeholder engagement is a democratic right [43].

Many of the arguments employed by commercial actors in the context of Scottish e-cigarette regulation strongly resemble well-known TTC arguments [10]. This highlights the need for policymakers to be aware of TTCs attempts to promote old arguments despite arguing that they are transforming their business and working towards a smoke-free future [44]. TTCs employed e-cigarettes as a deliberate strategy to undermine FCTC provisions and tobacco control, while trying

to re-build their credibility and influence via the promotion of reduced-risk products [7, 21, 37].

Strategies and arguments did not differ much between commercial actors, and were used to promote and protect their respective business interests.

## **Conclusions**

Our paper provides an account of commercial actor involvement in the early years of e-cigarette regulation in a specific setting and the market has continued to evolve since our data collection. However, since the UK was one of the first countries to introduce e-cigarette regulation, and since many of the commercial actors we analysed operate internationally, our analysis should help to inform those seeking to understand commercial sector interests in e-cigarette regulation elsewhere. Specifically, it provides useful insights into the variation among commercial actors, and the potential for both collaboration and strategic distancing. The implementation of Article 5.3 is likely to be insufficient for ensuring e-cigarette policy development is protected from the broad array of such interests [45]. Instead, specific guidance on managing conflicts of interest within e-cigarette policy may be required.

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*Conflicts of interest:* The authors declare no conflicts of interest.

## Tables and Figures

**Table 1:** Classification of commercial actors engaged in the Scottish policy debate on e-cigarette regulation, their responses to the Scottish

Government consultation, and average support for policy proposals

<b>Categories of industry sectors</b>	<b>Definition</b>	<b>Organisations submitting consultation responses</b>	<b>Consultation responses and interviewees</b>	<b># response and % of possible responses (n=21)</b>	<b>Supportive responses</b>
<b>1. TTC, TTC subsidiaries and TTC-affiliated organisations</b>	Organisations submitting consultation responses which are either TTCs, owned by TTCs or had other direct links to TTCs (e.g. through membership, partnership, etc.)	<p>Transnational:</p> <ul style="list-style-type: none"> <li>- Japan Tobacco International (JTI, <a href="https://www.jti.com/">https://www.jti.com/</a>)</li> <li>- Imperial Tobacco Group (ITG, <a href="https://www.imperialbrandsplc.com">https://www.imperialbrandsplc.com</a>)</li> <li>- Fontem Ventures (ITG, <a href="https://www.imperialbrandsplc.com/about-us/our-companies/fontem-ventures.html">https://www.imperialbrandsplc.com/about-us/our-companies/fontem-ventures.html</a>)</li> <li>- Philip Morris Int. Ltd (PMI, <a href="https://www.pmi.com/">https://www.pmi.com/</a>)</li> <li>- Nicocigs Ltd (PMI, <a href="https://www.nicolites.com/">https://www.nicolites.com/</a>)</li> <li>- Nicoventures (BAT, <a href="https://www.govype.com/gb/en/">https://www.govype.com/gb/en/</a>)</li> </ul> <p>UK:</p> <ul style="list-style-type: none"> <li>- Imported Tobacco Products Advisory Council (ITPAC, no website found)</li> <li>- Tobacco Manufacturers' Association (TMA, <a href="http://the-tma.org.uk/">http://the-tma.org.uk/</a>)</li> </ul>	<p>Consultation responses: n= 11</p> <p>Interviewees: n=2</p>	91% (n=19)	41% (n=8)

		<ul style="list-style-type: none"> <li>- Cygnet UK Trading Ltd t/a blu eCigs (UK) (<a href="https://www.blu.com/en/GB">https://www.blu.com/en/GB</a>)</li> <li>- ECITA (EU) Ltd (<a href="http://www.ecita.org.uk/">http://www.ecita.org.uk/</a>)</li> <li>- FOREST (<a href="http://www.forestonline.org/">http://www.forestonline.org/</a>)</li> </ul>			
<b>2. Independent e-cigarette companies</b> with no direct links to TTCs	Companies producing e-cigarettes which are not owned by TTCs	<p>UK:</p> <ul style="list-style-type: none"> <li>- Totally Wicked Ltd (<a href="https://www.totallywicked-eliquld.co.uk/">https://www.totallywicked-eliquld.co.uk/</a>)</li> <li>- ROK Premium e-cigarettes (<a href="http://www.rokuniversal.co.uk">www.rokuniversal.co.uk</a>)</li> <li>- Vaporized, now VPZ (<a href="https://vpz.co.uk/">https://vpz.co.uk/</a>)</li> </ul> <p>Transnational:</p> <ul style="list-style-type: none"> <li>- Johnson and Johnson UK Ltd (<a href="https://www.jnj.com/">https://www.jnj.com/</a>)</li> <li>- Pfizer UK (<a href="http://www.pfizer.co.uk/">http://www.pfizer.co.uk/</a>)</li> </ul> <p>UK:</p> <ul style="list-style-type: none"> <li>- Boots UK (<a href="https://www.boots-uk.com/">https://www.boots-uk.com/</a>)</li> <li>- L Rowland and Co. Ltd (<a href="https://www.rowlandpharmacy.co.uk/">https://www.rowlandpharmacy.co.uk/</a>)</li> <li>- National Pharmacy Association (<a href="https://www.npa.co.uk/">https://www.npa.co.uk/</a>)</li> <li>- Company Chemists' Association (<a href="https://thecca.org.uk/">https://thecca.org.uk/</a>)</li> <li>- General Pharmaceutical Council (<a href="https://www.pharmacyregulation.org/">https://www.pharmacyregulation.org/</a>)</li> <li>- Royal Pharmaceutical Society (<a href="https://www.rpharms.com/">https://www.rpharms.com/</a>)</li> </ul> <p>Scotland:</p> <ul style="list-style-type: none"> <li>- Community Pharmacy Scotland (<a href="https://www.cps.scot/">https://www.cps.scot/</a>)</li> </ul>	Consultation responses: n= 3 Interviewees: n=2	79% (n=17)	39% (n=7)
<b>3. Manufacturers, retail and wholesale organisations, licensed to make/sell medicines, including pharmaceutical companies</b>	Companies and other organisations, which are either licensed to make or sell medical products or represent those licensed to sell medical products	<p>UK:</p> <ul style="list-style-type: none"> <li>- Boots UK (<a href="https://www.boots-uk.com/">https://www.boots-uk.com/</a>)</li> <li>- L Rowland and Co. Ltd (<a href="https://www.rowlandpharmacy.co.uk/">https://www.rowlandpharmacy.co.uk/</a>)</li> <li>- National Pharmacy Association (<a href="https://www.npa.co.uk/">https://www.npa.co.uk/</a>)</li> <li>- Company Chemists' Association (<a href="https://thecca.org.uk/">https://thecca.org.uk/</a>)</li> <li>- General Pharmaceutical Council (<a href="https://www.pharmacyregulation.org/">https://www.pharmacyregulation.org/</a>)</li> <li>- Royal Pharmaceutical Society (<a href="https://www.rpharms.com/">https://www.rpharms.com/</a>)</li> </ul> <p>Scotland:</p> <ul style="list-style-type: none"> <li>- Community Pharmacy Scotland (<a href="https://www.cps.scot/">https://www.cps.scot/</a>)</li> </ul>	Consultation responses: n= 9 Interviewees: n=4	76% (n=16)	75% (n=12)
<b>4. Retailers, wholesale</b>	Companies and other commercial	<p>UK:</p> <ul style="list-style-type: none"> <li>- National Federation of Retail Newsagents</li> </ul>	Consultation responses: n= 6	72% (n=15)	44% (n=7)

<b>4. Retailers, wholesale organisations and group representatives with an interest in selling e-cigarettes but <b>not</b> licensed to make/sell medicines</b>	Companies and other commercial organisations, which are not licensed to make or sell medical products	UK: - National Federation of Retail Newsagents (NFRN, <a href="https://thefedonline.com/">https://thefedonline.com/</a> ) - Petrol Retailers Association (PRA) ( <a href="https://www.ukpra.co.uk/">https://www.ukpra.co.uk/</a> ) - Co-operative Food Group ( <a href="https://www.coop.co.uk/">https://www.coop.co.uk/</a> ) - The Association of Convenience Stores Ltd ( <a href="https://www.acs.org.uk/">https://www.acs.org.uk/</a> )  Scotland: - Scottish Grocers Federation (SGF, <a href="https://www.sgfcot.co.uk/">https://www.sgfcot.co.uk/</a> ) - Scottish Wholesale Association (SWA, <a href="https://www.scottishwholesale.co.uk/">https://www.scottishwholesale.co.uk/</a> )	Consultation responses: n= 6 Interviewees: n=1	72% (n=15)	44% (n=7)
<b>5. Advertising industry representatives</b>	Companies and other commercial organisations with an interest in advertising (including the	UK: - Advertising Association ( <a href="https://www.adassoc.org.uk/">https://www.adassoc.org.uk/</a> ) - Institute of Practitioners in Advertising ( <a href="https://ipa.co.uk/">https://ipa.co.uk/</a> ) - Advertising Standards Authority (	Consultation responses: n= 3 Interviewees: n=0	10% (n=2)	0% (n=0)

**Table 2** Commercial actor overall response rate and support for each e-cigarette policy proposal suggested in the policy consultation process.

Proposed regulation	Response rate <sup>1</sup>	% of actors agreeing with the proposal (and # of supportive responses)	Support by actor category <sup>2</sup>				
			1. TTC, TTC subsidiaries and TTC-affiliated organisations (n=11)	2. Independent e-cigarette companies (n=3)	3. Organisations licensed to make/sell medicines (n=9)	4. Retailers/organisations not licensed to make/sell medicine (n=6)	5. Advertising industry representatives (n=3)
<b>Regulatory proposals relating to Age of Sale (AoS)</b>							
The minimum AoS for e-cigarettes should be set at 18.	81% (n=26)	78% (n=25)	82% (n=9)	100% (n=3)	78% (n=7)	100% (n=6)	0% (n=0)
AoS regulation should apply to all products, not just those containing nicotine.	63% (n=20)	59% (n=19)	73% (n=8)	67% (n=2)	67% (n=6)	50% (n=3)	0% (n=0)
AoS regulation offence should apply to both retailer and purchaser.	56% (n=18)	31% (n=10)	27% (n=3)	33% (n=1)	33% (n=3)	50% (n=3)	0% (n=0)
Sales of e-cigarette devices and refills from self-service vending machines should be banned.	72% (n=23)	50% (n=16)	27% (n=3)	67% (n=2)	78% (n=7)	67% (n=4)	0% (n=0)
AoS restrictions should also apply to e-cigarette accessories.	56% (n=18)	22% (n=7)	9% (n=1)	33% (n=1)	44% (n=4)	17% (n=1)	0% (n=0)
It should be an offence to proxy purchase e-cigarettes.	72% (n=23)	69% (n=22)	73% (n=8)	100% (n=3)	56% (n=5)	100% (n=6)	0% (n=0)
There should be an age verification policy ‘Challenge 25’.	75% (n=24)	50% (n=16)	64% (n=7)	67% (n=2)	33% (n=3)	67% (n=4)	0% (n=0)
Penalties for selling e-cigarettes to under-18s should be the same as for tobacco.	63% (n=20)	31% (n=10)	36% (n=4)	33% (n=1)	22% (n=2)	50% (n=3)	0% (n=0)
<b>Regulatory proposals relating to e-cigarette advertising</b>							
There should be regulation of domestic	69% (n=22)	38% (n=12)	45% (n=5)	33% (n=1)	44% (n=4)	33% (n=2)	0% (n=0)

advertising.									
Regulation of advertising of e-cigarettes should be in addition to that introduced by the EU Tobacco Products Directive.	75% (n=24)	22% (n=7)	18% (n=2)	0% (n=0)	56% (n=5)	0% (n=0)	0% (n=0)	0% (n=0)	0% (n=0)
Billboard advertising should be banned.	59% (n=19)	19% (n=6)	9% (n=1)	0% (n=0)	56% (n=5)	0% (n=0)	0% (n=0)	0% (n=0)	0% (n=0)
Leafletting should be banned.	59% (n=19)	19% (n=6)	9% (n=1)	0% (n=0)	56% (n=5)	0% (n=0)	0% (n=0)	0% (n=0)	0% (n=0)
Brand stretching should be banned.	63% (n=20)	22% (n=7)	18% (n=2)	0% (n=0)	56% (n=5)	0% (n=0)	0% (n=0)	0% (n=0)	0% (n=0)
Free distribution of e-cigarettes should be banned.	66% (n=21)	19% (n=6)	9% (n=1)	0% (n=0)	56% (n=5)	0% (n=0)	0% (n=0)	0% (n=0)	0% (n=0)
Nominal pricing for e-cigarettes should be banned.	63% (n=20)	19% (n=6)	9% (n=1)	0% (n=0)	56% (n=5)	0% (n=0)	0% (n=0)	0% (n=0)	0% (n=0)
Point of sales advertising should be banned.	63% (n=20)	19% (n=6)	9% (n=1)	0% (n=0)	56% (n=5)	0% (n=0)	0% (n=0)	0% (n=0)	0% (n=0)
Events sponsorship should be banned.	63% (n=20)	22% (n=7)	18% (n=2)	0% (n=0)	56% (n=5)	0% (n=0)	0% (n=0)	0% (n=0)	0% (n=0)
<b>Regulatory proposals relating to e-cigarette retailers</b>									
There should be a Scottish Retailer Register for e-cigarette devices and refills.	72% (n=23)	28% (n=9)	27% (n=3)	33% (n=1)	22% (n=2)	50% (n=3)	0% (n=0)	0% (n=0)	0% (n=0)
The offences and penalties should reflect those already in place for the Scottish Tobacco Retailers Register.	66% (n=21)	31% (n=10)	27% (n=3)	33% (n=1)	33% (n=3)	50% (n=3)	0% (n=0)	0% (n=0)	0% (n=0)
Sales of e-cigarettes by those under 18 should be prohibited.	75% (n=24)	22% (n=7)	36% (n=4)	0% (n=0)	11% (n=1)	33% (n=2)	0% (n=0)	0% (n=0)	0% (n=0)
<b>Regulatory proposals relating to use of e-cigarettes in public places</b>									
Use of e-cigarettes in enclosed public spaces should be banned.	63% (n=20)	9% (n=3)	0% (n=0)	0% (n=0)	33% (n=3)	0% (n=0)	0% (n=0)	0% (n=0)	0% (n=0)

<sup>1</sup> Response rate = percentage/number of actors that expressed a view either in support of or opposition to the proposed regulation. Balance represents missing or unclear data i.e.: actors not expressing a clear view. <sup>2</sup> Percentage represents the support within each actor category



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